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10/743,572	12/22/2003	Masao Umemoto	0524-0154	7991

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EXAMINER

GREEN, ANTHONY J

ART UNIT PAPER NUMBER

1755

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/743,572

Applicant(s)

UMEMOTO, MASAO

Examiner

Anthony J. Green

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I, claims 1-9 in the reply filed on 27 June 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Specification No. 10-219230 A.

The reference teaches, in the abstract, an anti-freeze agent consisting of magnesium chloride, potassium chloride and sodium chloride.

The instant claims are met by the reference. While it does not state that the composition is a cold storage agent, it is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re

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Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971).

4. Claims 1-2,4 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Specification No. 2002-129151A.

The reference teaches, in the abstract, a cold storage agent comprising sodium chloride, potassium chloride and water.

The instant claims are met by the reference.

5. Claims 1-3 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Crespo et al (US Patent No 6,248,588 B1).

The reference teaches, in claim 31 a frozen biological composition comprising a isotonic saline solution comprising sodium chloride, potassium chloride, magnesium chloride and sodium lactate.

The instant claims are met by the reference.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by applicants own admitted prior art.

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Applicant recites in the specification that composition comprising mixtures of sodium nitrate and ammonium nitrate are known. See page 1, lines 15-16 of the instant specification.

7. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Pinckernelle et al (US Patent No. 3,505,234).

The reference teaches, in example 2, a composition that encompasses that which is instantly claimed.

While it does not state that the composition is a cold storage agent, it is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 1, 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Specification No. 57-029349 A.

The reference teaches, in the abstract, a freezing mixture comprising sodium sulphate decahydrate and at least one of calcium nitrate tetrahydrate, calcium chloride tetrahydrate and/or magnesium chloride hexahydrate.

The instant claims are obvious over the reference as the reference provides the motivation to formulate a composition that encompasses that which is instantly claimed.

10. Claims 1-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent Specification No. 3415113A.

The reference teaches, in the abstract, a cold storage medium comprising a eutectic brine comprising sodium chloride, calcium chloride or magnesium chloride or a mixture thereof.

The instant claims are obvious over the reference as the reference provides the motivation to formulate a composition that encompasses that which is instantly claimed.

11. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaes (US Patent No. 5,853,610A).

The reference teaches, in the claims, a composition comprising at least one inorganic chloride selected from the group consisting of sodium chloride, calcium chloride and magnesium chloride and an additive.

The instant claims are obvious over the reference as the reference provides the motivation to formulate a composition that encompasses that which is instantly claimed. While it does not state that the composition is a cold storage agent, it is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971).

12. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toth et al (US Patent No. 4,676,918 A).

The reference teaches, in the claims (see claim 1), an antifreeze composition comprising at least one component selected from the group consisting of sodium chloride, calcium chloride, potassium chloride, magnesium chloride and urea; an admixture of a waste concentrate or the alcohol distilling industry and from 10 to 80% water.

The instant claims are obvious over the reference as the reference provides the motivation to formulate a composition that encompasses that which is instantly claimed.

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While it does not state that the composition is a cold storage agent, it is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971).

13. Claims 1-4 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloomer (US Patent No. 6,080,330).

The reference teaches, in the claims, a composition for deicing and inhibiting the formation of ice and snow comprising from 25-99% by volume of desugared sugar beet molasses and 1-75% by volume of a component selected from the group consisting of sodium formate, calcium magnesium acetate, potassium acetate, sodium chloride, magnesium chloride and potassium chloride and mixtures thereof. Claim 5 recites that the component is mixed in from 1-20 volume% of water.

The instant claims are obvious over the reference as the reference provides the motivation to formulate a composition that encompasses that which is instantly claimed. While it does not state that the composition is a cold storage agent, it is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of



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tangible evidence that the prior art composition does not necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971). As for the amounts of components in claims 7 and 8 it is the position of the examiner that the amounts could fall within the claimed ranges as the reference teaches that as low as 1% of a the component is added and if more than 1 component is added the amounts could theoretically fall within the claimed range (i.e. 1% of one component and from ½ to 1/8 wt% of the other. One of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages”, In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

***Claim Rejections - 35 USC § 112***

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims 4-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4 it is unclear as to what is meant by the phrase "main component".

In claim 5 the use of the term "preferably" renders the claim vague and indefinite as a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

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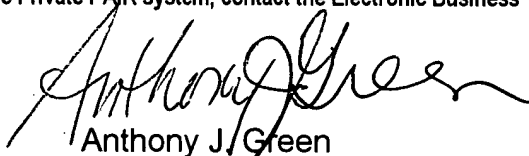
***Allowable Subject Matter***

16. Claims 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and provided that all 112 rejections are overcome.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Green whose telephone number is 571-272-1367. The examiner can normally be reached on Monday-Thursday 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Anthony J. Green  
Primary Examiner  
Art Unit 1755

ajg  
August 08, 2005